CLAIMS

What is claimed is:

1. A method of limiting propagation of requests for a file comprising:

sharing index information associated with the file from a first network node to a second network node in a peer to peer system;

updating a distance counter in the index information by the second network node; and

setting a request propagation limit in a request packet for requesting the file by the second network node to the distance counter.

2. The method of claim 1, wherein the distance counter represents a maximum number of hops between network nodes from a creator of the file to a requester of the file within the peer to peer system.

3. The method of claim 1, further comprising sharing the index information from the second network node to a third network node, updating the distance counter by the third network node, and setting the request propagation limit by the third network node.

4. The method of claim 1, further comprising receiving the request packet by a network node and forwarding the request packet to another network node only when the request propagation limit is not reached.

5. The method of claim 1, further comprising creating the file and creating the index information by a single network node.

6. The method of claim 5, further comprising assigning a globally unique identifier to the file by the first network node.

7. The method of claim 1, wherein the index information is shared between the first network node and the second network node only when a user operating the first network node has a social connection to a user operating the second network node.

8. An article comprising: a storage medium having a plurality of machine readable instructions, wherein when the instructions are executed by a processor, the instructions provide for limiting propagation of requests for a file by sharing index information associated with the file from a first network node to a second network node in a peer to peer system; updating a distance counter in the index information by the second network node; and setting a request propagation limit in a request packet for requesting the file by the second network node to the distance counter.

9. The article of claim 8, wherein the distance counter represents a maximum number of hops between network nodes from a creator of the file to a requester of the file within the peer to peer system.

10. The article of claim 8, further comprising instructions for sharing the index information from the second network node to a third network node, updating the distance counter by the third network node, and setting the request propagation limit by the third network node.

11. The article of claim 8, further comprising instructions for receiving the request packet by a network node and forwarding the request packet to another network node only when the request propagation limit is not reached.

12. The article of claim 8, further comprising instructions for creating the file and creating the index information by a single network node.

13. The article of claim 12, further comprising instructions for assigning a globally unique identifier to the file by the first network node.

14. A method of operating a plurality of network nodes to limit propagation of requests for a file in a peer to peer system comprising:

creating a file and assigning a globally unique identifier to the file by a first network node;

sharing index information associated with the file by the first network node with a second network node in the peer to peer system;

updating a distance counter in the index information by the second network node to denote the sharing of the index information;

setting a request propagation limit in a request packet for requesting the file by the second network node to the distance counter; and

forwarding the request packet to another network node only when a propagation counter for the request packet does not exceed the request propagation limit.

15. The method of claim 14, further comprising updating the propagation counter when a network node forwards the request packet to another network node.

16. The method of claim 14, further comprising sending the requested file to the second network node.

17. The method of claim 14, further comprising repeating the sharing and updating steps for a plurality of network nodes.

18. The method of claim 14, wherein sharing the index information comprises sharing the index information only among network nodes operated by users with a social connection to each other.

19. The method of claim 14, further comprising encrypting the index information prior to sharing the index information.

20. An article comprising: a storage medium having a plurality of machine readable instructions, wherein when the instructions are executed by a processor, the instructions provide for operating a plurality of network nodes to limit propagation of requests for a file in a peer to peer system by creating a file and assigning a globally unique identifier to the file by a first network node; sharing index information associated with the file by the first network node with a second network node in the peer to peer system; updating a distance counter in the index information by the second network node to denote the sharing of the index information; setting a request propagation limit in a request packet for requesting the file by the second network node to the distance counter; and forwarding the request packet to another network node only when a propagation counter for the request packet does not exceed the request propagation limit.

21. The article of claim 20, further comprising instructions for updating the propagation counter when a network node forwards the request packet to another network node.

22. The article of claim 20, further comprising instructions for sending the requested file to the second network node.

23. The article of claim 20, further comprising instructions for repeating the sharing and updating steps for a plurality of network nodes.

24. The article of claim 20, wherein instructions for sharing the index information comprises instructions for sharing the index information only among network nodes operated by users with a social connection to each other.

25. The article of claim 20, further comprising instructions for encrypting the index information prior to sharing the index information.

26. A peer to peer file sharing system comprising:

a plurality of network nodes, wherein each network node creates files and assigns a globally unique identifier to each created file, shares index information associated with each of the created files with other network nodes, updates a distance counter in the index information to denote sharing of the index information, sets a request propagation limit in a request packet for requesting a file to the distance counter; and forwards the request packet to another network node only when the request propagation limit is not reached.

27. The peer to peer system of claim 26, wherein the files store at least one of digital photographs, digital videos, digital audio data, image data, or text data.

28. The peer to peer system of claim 26, wherein the network nodes of the peer to peer system are operated by users having a social connection.

29. The peer to peer system of claim 26, wherein the distance counter represents a maximum number of hops between network nodes from a creator of a file to a requester of the file within the peer to peer system.

30. The peer to peer system of claim 26, wherein only one network node creates a selected file and creates index information for the selected file.